

LRP130 (E-12): sc-376657

BACKGROUND

The leucine-rich (LRR) repeat is a 20-30 amino acid motif that forms a hydrophobic α/β horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRR repeats contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. Leucine-rich protein (LRP130) is a cytoplasmic mRNA-binding protein likely to be involved in the processing of mitochondrial DNA transcripts. Defects in the LRPPRC gene that encodes LRP130 result in the French-Canadian type of Leigh syndrome, a severe neurological disorder characterized by lesions in the subcortical region of the brain. LRP130 also interacts with the low-affinity receptor for leukemia inhibitory factor to produce an intracellular signal cascade.

REFERENCES

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- Kobe, B., et al. 1994. The leucine-rich repeat: a versatile binding motif. *Trends Biochem. Sci.* 19: 415-421.
- Kobe, B., et al. 1995. Proteins with leucine-rich repeats. *Curr. Opin. Struct. Biol.* 5: 409-416.
- Kobe, B., et al. 2001. The leucine-rich repeat as a protein recognition motif. *Curr. Opin. Struct. Biol.* 11: 725-732.
- Liu, L., et al. 2002. Sequence analysis of LRPPRC and its SEC1 domain interaction partners suggests roles in cytoskeletal organization, vesicular trafficking, nucleocytosolic shuttling, and chromosome activity. *Genomics* 79: 124-136.
- Tsuchiya, N., et al. 2004. LRP130, a single-stranded DNA/RNA-binding protein, localizes at the outer nuclear and endoplasmic reticulum membrane, and interacts with mRNA *in vivo*. *Biochem. Biophys. Res. Commun.* 317: 736-743.

CHROMOSOMAL LOCATION

Genetic locus: LRPPRC (human) mapping to 2p21; Lrp130 (mouse) mapping to 17 E4.

SOURCE

LRP130 (E-12) is a mouse monoclonal antibody raised against amino acids 1007-1306 mapping at the C-terminus of LRP130 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376657 X, 200 μ g/0.1 ml.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

LRP130 (E-12) is recommended for detection of LRP130 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LRP130 siRNA (h): sc-44734, LRP130 siRNA (m): sc-44735, LRP130 shRNA Plasmid (h): sc-44734-SH, LRP130 shRNA Plasmid (m): sc-44735-SH, LRP130 shRNA (h) Lentiviral Particles: sc-44734-V and LRP130 shRNA (m) Lentiviral Particles: sc-44735-V.

LRP130 (E-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

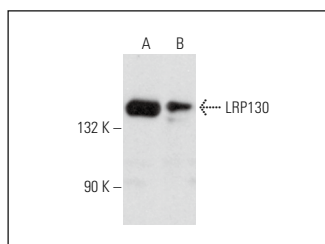
Molecular Weight of LRP130: 137 kDa.

Positive Controls: rat liver extract: sc-2395, A-10 cell lysate: sc-3806 or mouse liver extract: sc-2256.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



LRP130 (E-12): sc-376657. Western blot analysis of LRP130 expression in A-10 whole cell lysate (A) and rat liver tissue extract (B).

RESEARCH USE

For research use only, not for use in diagnostic procedures.



See **LRP130 (F-7): sc-166178** for LRP130 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.